DOCUMENT RESUME

ED 381 667 CE 068 789

AUTHOR McNeil, Patricia W.; Kulick, Christine D.
TITLE Employers' Role in School-to-Work Opportunities. Education Reform and School-to-Work Transition Series.
INSTITUTION Academy for Educational Development, Washington, DC. National Inst. for Work and Learning.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE 95
CONTRACT RR91172012
NOTE 43p.; For other documents in this series, see CE 068 788-792.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Educational Policy; *Education Work Relationship; Employer Attitudes; *Participation; *Partnerships in Education; Program Descriptions; *Public Policy; Questionnaires; Recruitment; *School Business Relationship; Secondary Education; Transitional Programs; *Vocational Education
IDENTIFIERS *Employer Role; Employer Surveys

ABSTRACT

Five employers who were currently participating in school-to-work opportunity programs in the finance, health, hospitality, machining, and printing/graphic arts industries were interviewed to determine why and how employers participate in school-to-work transition programs. The employers were selected to represent a cross-section of industries, business sizes, and geographic areas. Special attention was paid to employers' roles in program governance, design, curriculum development, and activities and delivery of services. The following topics were also examined: benefits of school-to-work transitions to employers and students, employer recruitment strategies, and employers' understanding of employment-related education programs. No universal model of employer participation was found. Employers consistently stated that their primary reason for participating in programs was to obtain higher-skilled entry-level workers. The employers supported the public policies providing the following: less red tape, paperwork, and government involvement in programs; creation of intermediary organizations to interface with schools, students, and employers; and financial incentives (including tax incentives, student wage subsidies, and reimbursement for staff assigned to train students in work-based learning components) to encourage employer participation. (Appended are the employer questionnaire and descriptions of school-to-work transition programs in the five industries studied.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

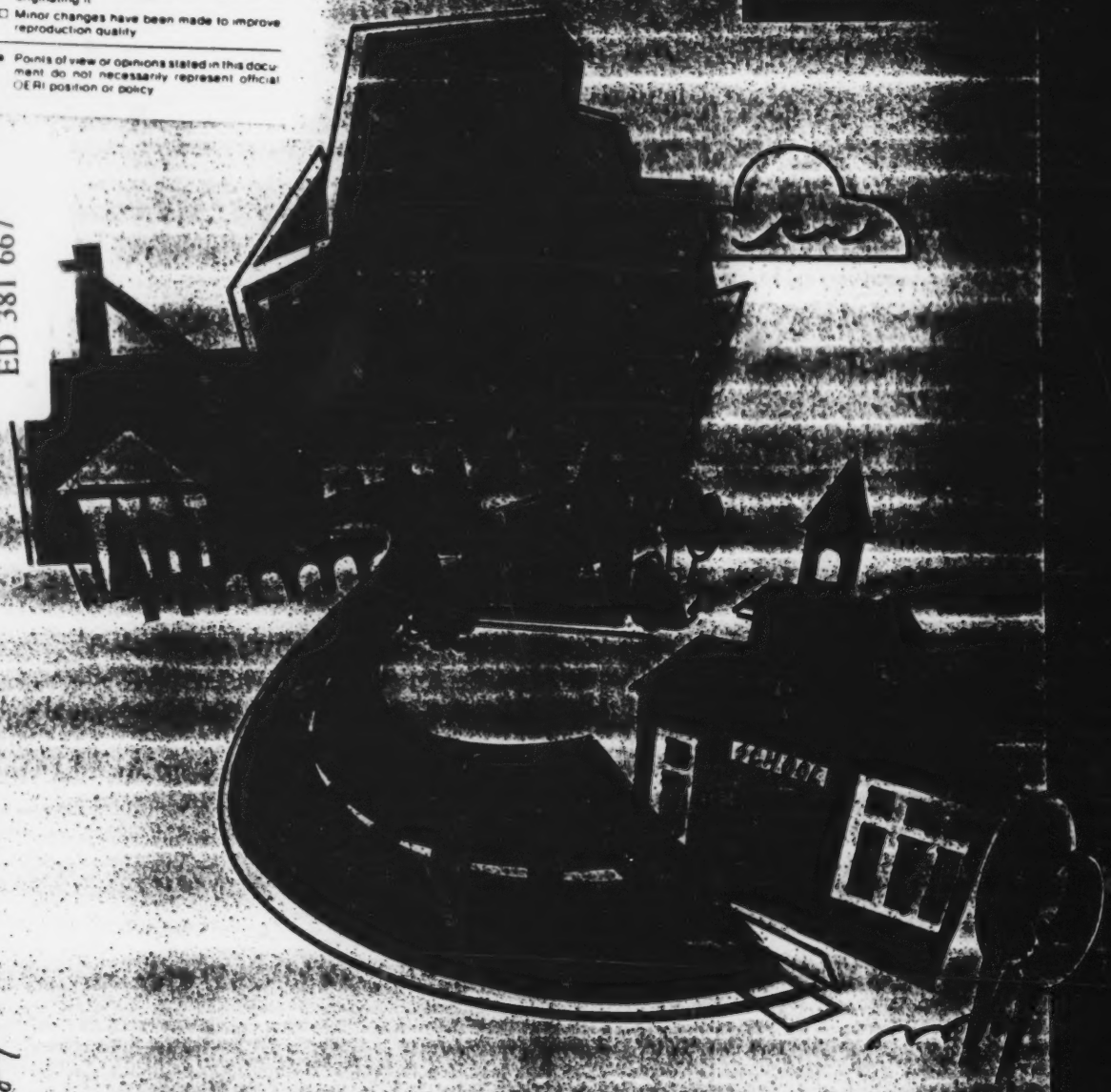
U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 381 667



CE 068 789

BEST COPY AVAILABLE

The National Institute for Work and Learning seeks to bring the work, education, government, and community sectors together around the shared goal of working collaboratively to improve education-work relationships in the interests of individuals and society. Three areas of concentration define the Institute's activities: successful youth transition; worklife education and adult literacy; and productive aging. The Institute accomplishes its mission in each of these areas through research, program documentation and evaluation, policy analysis, technical assistance and training, and information networking.

Employers' Role in School-to-Work Opportunities

by Patricia W. McNeil and Christine D. Kulick

Prepared for

National Institute for Work and Learning
Academy for Educational Development

The Academy for Educational Development, founded in 1961, is an independent, nonprofit service organization committed to addressing human development needs in the United States and throughout the world. Under contracts and grants, the Academy operates programs in collaboration with policy leaders; nongovernmental and community-based organizations; governmental agencies; international multilateral and bilateral funders; and schools, colleges, and universities. In partnership with its clients, the Academy seeks to meet today's social, economic, and environmental challenges through education and human resource development; to apply state-of-the art education, training, research, technology, management, behavioral analysis, and social marketing techniques to solve problems; and to improve knowledge and skills throughout the world as the most effective means for stimulating growth, reducing poverty, and promoting democratic and humanitarian ideals.

The Academy for Educational Development is registered with the U.S. Agency for International Development as a private voluntary organization. The Academy is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. Contributions to the Academy are tax deductible.

Funds for the printing and dissemination of this publication were provided by the Academy for Educational Development.

Printed in the U.S.A.

1995

Contents

Foreword ii

Preface v

Introduction 1

Engaging Employers in School-to-Work Initiatives 3

- Why Employers Participate in School-to-Work Initiatives
- Benefits Employers Anticipate by Participating in a School-to-Work Program
- School-to-Work Opportunities—An Educational Enhancement or a Work Force Preparation Strategy?
- Employer Recruitment Strategies
- Employers' Understanding of Employment-Related Education Programs

Role of Employers 11

- Governance
- Program Design
- Curriculum Development
- Activities and Services Provided by Employers

Public Policies Affecting Employer Participation 19

- Financial Incentives
- Nonfinancial Incentives

Conclusion 21

- Recruiting Employers
- Public Policies

Appendix A: Program Summaries 23

Appendix B: Employer Survey 27

Foreword

As we approach the twenty-first century, a large segment of our nation's young people are having a harder and harder time moving from school to work with any reasonable prospect for long-term productive employment. The lack of a comprehensive and effective school-to-work transition system not only frustrates many students but also has substantial costs to business and to our economy as a whole. A skill-deficient work force hampers our nation's economic growth, productivity, and ability to compete in an international economy. New modes of information and technology have forced a restructuring of the home, the school, and the workplace. As a result, there is a critical need to create systems that effectively serve the interests and potential of young people who are not planning to enter college directly after high school. These students need to leave school with the diverse skills, knowledge, abilities, and attitudes necessary for a rapidly changing world of work; community, social, family, and adult responsibilities; and lifelong learning.

The School-to-Work Opportunities Act of 1994 offers a chance to bring together partnerships of employers, educators, and others to build an effective school-to-work system that prepares young people for either high-quality jobs or further education and training. The new systems must include the following basic program elements:

- work-based learning that provides a planned program of job training or experiences, paid work experience, workplace mentoring, and instruction in general workplace competencies

- school-based learning that provides career exploration and counseling, instruction in a career major, and a program of study that is based on high academic and occupational skill standards

- connecting activities that bring schools, students, and employers together to connect the worlds of school and work by matching students with work-based learning opportunities and by training teachers, mentors, and counselors

The challenge is to build and implement a new system that moves beyond business as usual for students who are not on the college path. Their transition process from school to work must become the coordinated responsibility of school, family, business, community, and government. No single institution can or should take sole responsibility for or be expected to provide all of the approaches to educating, training, guiding, preparing, and supporting our young people.

The Academy for Educational Development's National Institute for Work and Learning has undertaken a Study of School-to-Work Transition Education Reform supported by the U.S. Department of Education, Office of Educational Research and Improvement. The study focuses on the planning and design, implementation, and impact of school-to-work transition reform initiatives. By documenting the design and integrity of exemplary programs and by assessing program experiences and impact, the study offers critical lessons for those interested in adapting or adopting programs that effectively link schools with the business community to improve the transition from school to work. As part of the study, a series of papers have been commissioned to identify critical issues facing practitioners and policy makers as they begin to design and implement new school-to-work transition systems.

The overall study has been guided by a National Advisory Panel, which has provided direction and advice on the issues to be explored and topics to be considered. The National Advisory Panel comprises the following individuals:

Paul Barton
Director
Policy Information Center
Educational Testing Service

Cynthia Brown
Director
Resource Center on Educational Equity
Council of Chief State School Officers

Jacqueline P. Danzberger
Director of Governance Programs
Institute for Educational Leadership

Sandra Jibrell
Senior Planning Associate
Annie E. Casey Foundation

Anita Lancaster
Assistant Director
Defense Manpower Data Center

Hilary Pennington
President
Jobs for the Future

Franklin Smith
Superintendent
District of Columbia Public Schools

Nevzer Stacey
Senior Program Officer
Office of Educational Research and Improvement

David Stern
Professor
School of Education
University of California

Rafael Valdivieso
Vice President
Academy for Educational Development

This paper accomplishes the following:

- provides insights and lessons on employer recruitment and involvement in the design and implementation of school-to-work initiatives
- explores federal, state, and local policies that have a positive effect on employers' decisions to participate in these initiatives
- focuses on a set of interviews with five employers from five occupational industries that appear to have the greatest level of involvement in school-to-work opportunities
- examines the reasons for employer involvement, the benefits employers hope to accrue by participating, recruitment strategies, and employers' understanding of employment-related education programs
- discusses the role of employers in the planning, development, implementation, and operation of school-to-work systems at the state and local level
- explores issues of program design, curriculum development, and activities and services provided
- offers a set of public policies and approaches for encouraging employer participation or for expanding participation including both financial and nonfinancial incentives
- presents an essential set of specific observations and critical lessons on engaging employers as states and localities move toward implementing the School-to-Work Opportunities Act of 1994

Ivan Charner
Vice President and Director
National Institute for Work and Learning

Preface

To learn more about the role of employers in school-to-work opportunity programs, the National Institute for Work and Learning of the Academy for Educational Development asked Patricia W. McNeil and Christine D. Kulick of Workforce Policy Associates to interview five employers who are participating in such initiatives. The employers were selected from five occupational industries that appear to have the greatest level of involvement in school-to-work opportunities: financial services, health, hospitality, machining, and printing/graphic arts. The five individual employers were selected from a limited pool of employers participating in pioneering local school-to-work programs that have received federal, state, or foundation grants to initiate school-to-work transition demonstrations. In addition to occupational cluster, employer selection was based on two criteria: (1) size of the business—representatives of small, medium, and large employers were included—and (2) geographic distribution—representation spanned the country, with sites in the East, Midwest, West, and Southwest.

The conclusions in this study are based primarily on interviews with the five employers. However, the study has also drawn information from numerous other studies of school-to-work opportunities conducted by Workforce Policy Associates and from discussions with employers and industry associations involved in the field.

Introduction

The nation is about to embark on an effort to create an effective system for helping secondary-school-age youth make successful transitions to work and future learning. As practiced in other industrialized nations and in scattered pilot and demonstration programs here in the United States, young people would be educated in both the classroom and the workplace once they reach tenth or eleventh grade—a broad departure from current practice. Employers are critical to the development of this new system. The School-to-Work Opportunities Act requires states and localities to engage employers in its planning, governance, and implementation. But more important, employers will be asked to provide (1) paid work experience for students, (2) a planned program of job training and work experiences leading to a skills certificate, (3) workplace mentors, and (4) instruction in general workplace competencies. The ultimate goal of the law is to provide a significant number of students in each community with structured learning opportunities in the workplace.

The development of such a system will require an unprecedented scale of employer commitment and involvement. Currently, many employers assist schools by donating equipment, providing part-time work experience to students, and participating in career days. Employers also hire large numbers of young people to work in relatively low-skilled jobs after school and in the summer. More than 60 percent of all high school seniors work part-time. However, under the new system, employers would be asked to play an important and ongoing role in the education of young people by providing structured learning opportunities in the workplace under the guidance of experienced workers. While there appears to be support for such a system among employers, it is less certain whether employers will be willing to participate on a scale large enough to serve significant numbers of young people and whether it will be possible to create work-based learning opportunities that are consistently of high quality.

This study was designed to provide insights to policy makers and systems developers, including educators, on employer recruitment and involvement in the design and implementation of school-to-work systems nationwide. The study examined the following areas:

- reasons employers become involved and the benefits they anticipate their firms will receive by participating
- roles employers are willing to play
- policies that employers believe could positively affect private sector participation

Employers participating in pioneering school-to-work efforts throughout the country can provide some insights into what is necessary to recruit and engage employers in intensive work-site learning programs for young people. For this study, five employers were chosen for intensive interviews. They were selected from a pool of local programs that have received federal, state, or foundation grants to initiate school-to-work transition demonstrations. Four of the five employers were identified by contacting local program staff to determine the most knowledgeable decision makers in the company on school-to-work efforts. The fifth was recommended by another employer who was instrumental in initiating the local school-to-work pilot.

Employers were selected from five different industries: financial services, health, hospitality, machining, and printing/graphic arts. These are among the sectors most frequently targeted by states and localities for their initial school-to-work efforts. The five participating firms interviewed ranged in size from 20 to 8,500 employees on site, including one single-site small business (Wood & Jones Printing Co.), two firms with numerous facilities in a particular region (Sutter Health and John Hancock Financial Services), a U.S.-based international firm (Marriott Corporation), and a U.S. affiliate of a multinational corporation (Weldun International). Employers were located in rural, suburban, and urban areas. They also spanned the country, with sites in the East, Midwest, West, and Southwest.

The number of students and the degree of employer involvement also varied. The numbers of students involved with each employer ranged from one (Wood & Jones) to 30 (Hancock). At Wood & Jones, the employer was acting as a mentor for one student who was engaged in a career academy and work-site learning experience as part of a larger program. At Weldun, students were getting their training at the company training facility. At Sutter, students were involved in work-site learning closely related to their classroom education. (See Table 1 for details on the firms and students served.)

Table 1

Employers Involved in School-to-Work Study

Industry	Location	Firm	Number of Students Involved	Employer Size
Financial Services	Boston, MA	John Hancock Financial Services	30	7,000
Health	Sacramento, CA	Sutter Health	8	8,500
Hospitality	Norman, OK	Marriott Corporation	7	250
Machining	West Berrien, MI	Weldun International Corporation	14	400
Printing	Glendale, CA	Wood & Jones	1	20

When interviewed, all employers were each asked the same set of ten questions. Prior to the interview, they were told the general purpose of the interview, but they did not receive the specific questions in advance. The interviews were conducted between November 30 and December 8, 1993. Although five employers representing different industries are not a representative sample of employers, their insights can contribute to the emerging body of knowledge regarding employer involvement in school-to-work efforts.

Engaging Employers in School-to-Work Initiatives

To gain insights into how employers could become engaged in school-to-work activities, interview participants were asked why they chose to become involved and what benefits they expected to accrue to their firms because of their participation. They were also asked whether they would participate if the initiative were presented as purely an educational improvement strategy with no expectation that young people would enter the field in which they were trained. In addition, employers were questioned about their knowledge of several work-related programs—vocational education,

cooperative education, youth apprenticeship, and Tech Prep. Finally, employers were asked their opinions on the effectiveness of specific recruitment techniques.

Employers gave three major reasons for becoming involved: (1) concern about the quality of education young people were receiving, (2) a commitment to their local community, and (3) the need for higher-skilled entry-level workers. These findings are consistent with those of other studies on school-to-work initiatives.

When asked what they expected to gain from their participation, however, employers consistently answered "a higher-skilled entry-level worker." They also believe school-to-work opportunity programs will provide them with reliable information to screen new employees.

Employers who are making the greatest commitment of staff and financial resources through structured, paid work-based learning experiences for the students have the highest expectations for students to enter their industry, if not their firm. It appears, however, that employers making this type of concerted investment can only provide a limited number of students with intense work-based learning experiences. Employers, while willing to dedicate time and resources to school-to-work efforts, are not uniformly able to provide the same level and range of training and services. A number of factors affect employer involvement. Economic conditions of the community play an important role in the ability of firms to offer paid work experience. Strong support from the corporate leadership and their personal experiences with or commitment to community-based projects appear to increase the degree of effort a firm is willing to make. Employers making a smaller investment in the students are more likely to accept the school-to-work effort as an enhanced educational strategy with fewer expectations for the students to enter the industry.

Firms with a desire to present a good corporate image also have a high intensity of involvement. This commitment appears especially strong in direct service industries such as health and hospitality.

The following sections provide more detailed information on engaging employers in school-to-work opportunities, the benefits they anticipate from participation, their knowledge of several work-related programs, and their opinions on certain recruitment techniques.

Why Employers Participate in School-to-Work Initiatives

Employers are interested in and concerned about the quality of education young people are receiving in their local school districts and throughout their states. Two of the

five employers were most concerned about the quality of education provided in their local school districts. Two other employers indicated that their own schools were good, but they were concerned about education in other parts of their states. They believed that because of the transient nature of the population, students educated in other parts of the state might be likely to apply for positions with their firms. At least one employer is also hoping to expand its school-to-work program model to other Sutter Health facilities around the state; therefore, Sutter is concerned about the quality of the entire state's education system.

The owner of Wood & Jones Printing Co. indicated her concern over the quality of education provided to students at the local high schools. Her firsthand experience with the school system through her own children had a strong impact on her decision to become involved. She was impressed with the potential of the Career Academy Graphic Arts program in her community because she saw a definite need for students to become excited about an interesting field while receiving the added time and attention provided through the small school-within-a-school setting. Both Wood & Jones and Sutter Health, whose school-to-work programs are based in career academies, shared their support for the school-within-a-school approach, which provides additional student services and more intense, directed learning with a career focus.

Corporations that have had a commitment historically to "being good citizens" and contributing to the local community cite this dedication as an important motivation to participate. The Marriott Corporation and Sutter Health revealed that this commitment was a major factor affecting their companies' decision to participate in the school-to-work initiative. The Marriott Corporation has been involved in a variety of community programs, such as Meals on Wheels and Adopt a Highway, and its employees participate on numerous community boards. Sutter Health has a senior vice president who is assigned solely to community involvement projects, such as free medical clinics and the STAR program, which prepares children for school. John Hancock Financial Services indicated that its decision to participate in ProTech was initially altruistic; it saw the project as an investment in the future of the community with no immediate payback. Service industry employers in particular seem to view the school-to-work initiative as a logical next step in their companies' commitment to the community.

The need for a highly skilled, entry-level worker pool also had a significant impact on employers' decisions to participate; the opportunity to secure skilled entry-level workers was seen as a significant benefit the firms would reap through their involvement in the school-to-work effort. In rural Berrien, Michigan, where the primary industry is agriculture, the machining industry needs highly skilled technicians. Explaining the

need for a continuous pool of skilled students, Weldun's spokesperson said, "It is hard to take a berry picker and make him into a good electrical technician tomorrow." Marriott believes that if it can recruit good people while they are young, it can make them into "career people" for the industry. Sutter Health indicated that the need for good-quality entry-level workers was "an overriding justification for our involvement in youth apprenticeship. The qualified applicant pool is rapidly shrinking, and we think that this is an excellent way to 'grow our own,' so to speak."

Concern for the economic future also influenced employers' decisions to participate in school-to-work programs. Sutter Health sees its youth apprenticeship program as a way to "power us out of economic shambles through vigorous training of a new work force." Marriott indicated that the company and the country will "pay for it [lack of a skilled work force] one way or another with unemployment, welfare, and crime." Through school-to-work programs "young people will learn good work habits, and the real block and tackle skills they will need for life," according to the Marriott spokesperson.

A reduction in funds for the area vocational education programs provided an added impetus for Weldun International to begin its Manufacturing Technology-Targeted Training (MT3) program. Local school districts were eliminating their vocational education programs because of budget shortfalls. At the same time, Weldun International's chief executive officer (CEO) was assessing the use of Weldun's preapprenticeship on-site training center to determine if the firm needed the number of individuals the center could train, while a number of smaller employers in the area were indicating a need for more highly skilled entry-level workers. Through the joint efforts of the West Berrien County Career Technical Education Consortium and Weldun's CEO, "it became a win-win situation where we could continue our program, and yet we can offer it to a wider variety of people and a wider variety of companies," according to Weldun. The community and corporate needs merged, resulting in the MT3 program.

Employers rarely participate in school-to-work initiatives for a single reason. For most, it is a combination of factors, including concern over the quality of education and the future economy, the desire to be good citizens in the community, and the need for higher-skilled entry-level workers.

Benefits Employers Anticipate by Participating in a School-to-Work Program

As indicated earlier, employers consistently said that the first and most important benefit they anticipate from their school-to-work programs is a higher-skilled entry-level

worker. They also believe school-to-work programs will be an effective screening mechanism for new employees. Employers believe that the school-to-work programs will provide them with a more detailed and accurate profile of the technical, work readiness, and academic skills of the students. As the Weldun International spokesperson acknowledged,

> We have 180 days to look at these students to see their work, attendance habits, and the bells that make them get excited. . . . Our program has a real advantage for the employer.

Employers also believe that school-to-work programs benefit their existing workers by giving them more pride in the work they are performing, enhancing their skills through training students, and improving their self-esteem because students show interest in the work being performed. In addition, Marriott Corporation hopes its school-to-work program will enable the firm to cross-train current employees as the students take on some of their responsibilities—essentially opening up more career-ladder opportunities for existing employees.

Networking with other employers in their industries was another benefit cited. The Wood & Jones' spokesperson said, "I find I am building relationships with other printers in the area, which I think is real important."

Some employers felt that participation in school-to-work programs would provide the opportunity for their firms to move into more visible positions within their respective communities. For example, Sutter hopes that the communities it serves will see that Sutter cares about the community and is not just there to do business.

School-to-Work Opportunities—An Educational Enhancement or a Work Force Preparation Strategy?

To further explore employers' motivations and expectations, the respondents were asked whether it would affect their participation if the school-to-work program were presented solely as an educational improvement strategy. It was explained that this could mean that students might not enter their industry upon program completion or upon graduation from a postsecondary institution. Instead, by working in their firms, students would gain an understanding of how academic concepts can be applied to real work. Students would gain an understanding of the industry and would build a better work ethic.

Employer responses appeared to be directly tied to their primary motivation for participating in the local school-to-work programs and their level of financial commitment to the initiative. Marriott and Sutter Health are concerned with the skills of the entry-

level worker and are also providing career exploration; job shadowing; paid, structured work-based learning; and mentors. These employers felt that if the only goal of the school-to-work program were to provide an enhanced educational experience for the students, with none of the students entering their industries, their firms would not be willing to make the financial commitment they are currently making to the program. They realize that not all of the students will enter the industry or be hired by their firms. The firms do not want exclusive relationships with the students, and the current structure of the programs does not guarantee job placement. However, the Sutter spokesperson said,

> If we do not have access to this skilled, motivated, trained work force that we are producing, why be involved in it? . . . Sutter Health is clearly interested in having people motivated to enter health care, not just being an education enhancement tool for the State Department of Education.

The quality of education and concern over what is or is not happening within the schools is of significant concern to the other three firms. Weldun International, Wood & Jones, and John Hancock indicated that their firms could accept the goal of improving the education of youth. Last year's graduating class from John Hancock's Project Hope were all accepted into four-year postsecondary schools, an outcome applauded by the president of the firm. Weldun International identified the need for greater career exploration within the school systems and indicated that guidance counselors should use programs like MT3 to provide that career awareness. Wood & Jones responded that building a good work ethic through a school-to-work program could be one of the best outcomes possible for students and companies alike. The owner of Wood & Jones explained,

> All of the other things about kids entering the industry are important, but I see a complete lack of understanding of what it means to go to a job. I see it in my own employees.

It appears that employers making the largest financial commitment and providing paid, structured work-based learning experiences believe that school-to-work programs should have preparation for work in a particular industry as an important goal. Marriott and Sutter provide career exploration; job shadowing; mentors; and paid, structured work-based learning. Weldun has made a substantial investment and hopes its students will enter the industry.

Employer Recruitment Strategies

School-to-work opportunity programs have been initiated by educators, employers, and concerned citizens. As indicated above, the majority of the employers involved in the study were intricately involved in creating the program. However, this will not

always be the case. Therefore, the study queried employers on the impact various marketing or recruitment strategies would have on employers' willingness to become engaged in a school-to-work effort.

In general, although those interviewed were reluctant to speak for other employers in terms of how they might react to recruitment efforts, they agreed that the support and marketing of school-to-work programs by employers and by industry associations would have a significant impact on a firm's decision to participate. One employer said that if a competitor encouraged his company to participate, it would definitely want to take part to "save face in the marketplace." Employers emphasized that they respond more readily to other employers than they do to bureaucrats.

Those interviewed also said employers want to be equal partners in the process and not be brought into the initiative only as "window dressing" to meet the requirements of a law or regulation. Employers, the interviewees stressed, want the capacity and flexibility to shape the program and their role in it so that the program fits the needs of the local environment. They said that the role of the employer needs to be explained clearly in the recruitment process, but the marketing message should emphasize that employers can mold that role to their individual situations. In general, the majority noted that programs that appear well organized and make participation easy for employers will be the most attractive. While the ability to make a convincing case to substantiate the need for school-to-work initiatives was viewed as useful, it was definitely seen as less important than the ability to be an active partner or to work with a well-conceived effort.

The opportunity to network with other employers in the industry is viewed as an added bonus to involvement in school-to-work programs, but not a primary factor in the decision-making process. It was anticipated that smaller employers may view networking of greater importance than larger employers. One employer felt that participation in school-to-work programs would create a "sense of community among employers nationwide, that other employers would want to join to establish a training system for the next generation of workers."

Employers' Understanding of Employment-Related Education Programs

One factor that could affect an employer's willingness to participate in school-to-work initiatives is his or her perception of other work-related training programs, such as Tech Prep, cooperative education (co-op ed.), vocational education (voc. ed.), and youth apprenticeship. To obtain a general sense of the level of understanding and the

perception of these programs, interviewees were asked to describe them and give their overall impressions.

Employers had only a minimal understanding of Tech Prep and cooperative education. For example, only one interviewee could accurately describe the Tech Prep program authorized by the Carl Perkins Vocational Technology and Applied Education Act. This individual, who is responsible for the MT3 program at Weldun International, had previously worked in an area high school. The other employers had a general idea that it related to technology training, although they could not describe its features and did not have any firsthand knowledge of or experience with the program. Two of the five employers were familiar with cooperative education. One employer described it this way:

> Co-op becomes a way a student gets out of school for half a day, earns a couple of dollars, and keeps his car and girlfriend happy, where the job does not give him or her any insight into what that career is all about.

Employers were more familiar with vocational education and youth apprenticeship. Vocational education was generally described in negative terms. One employer indicated it was "the old way of training students that didn't work." Another employer responded,

> It brings to mind tired teachers, outdated equipment, and nobody cares. The other classes have no relationship to what the kids are doing in vocational education.

On the other hand, youth apprenticeship had a much more positive image. It was described as a process where students are shown a trade or career through a detailed process of combining academic and vocational education in the workplace. Those employers interviewed see youth apprenticeship as a European approach to education and one that the United States should pursue.

The fact that those interviewed have a limited understanding of many work-related programs or a negative perception of them has implications for employer recruitment. Program planners and recruiters might be more effective if they described new school-to-work initiatives to employers in terms of the activities they encompass and how students and employers will benefit, rather than using terms such as co-op ed., Tech Prep, or voc. ed., and youth apprenticeship.

Role of Employers

The School-to-Work Opportunities Act envisions extensive involvement of employers and anticipates that they will assume significant responsibilities in the planning, development, implementation, and ongoing operation of statewide school-to-work systems and local initiatives. Employers are essential in the tripartite programs required in the school-to-work initiative: work-based learning, school-based learning, and connecting activities. The work-based learning component goes beyond the typical work experience programs most employers have been involved with to date. The new initiative is encouraging employers to provide students with a paid, planned program of job training and work experience that leads to a skill certification, with skilled mentors serving as the trainers.

Employers in the study are involved in some, but not all, of the components the school-to-work initiative requires (see Table 2). All of the employers are active participants in the governance of school-to-work initiatives. Two of the employers serve on statewide steering committees created to advise, develop, and oversee their states' school-to-work opportunity programs. These experiences ignited their interest in the school-to-work effort and propelled them to initiate programs in their own communities. All but one of the employers serve on a local advisory or governance board. Two employers offer work-based learning activities that are consistent with the new initiative—structured, paid work-based learning under the supervision of skilled trainer-mentors. All of the employers are involved with programs that have a school-based component, although the curriculum does not integrate the academic and vocational learning to the extent the school-to-work opportunities initiative requires. Programs involving Weldun International and John Hancock have connecting activities and entities that interface with the schools, students, and employers. However, these entities do not provide all of the services a connecting component is intended to offer.

The following sections discuss the roles employers involved in the study are playing and the activities and services they are providing. These findings are then related to the school-to-work opportunities legislation. One thing is clear: there is no universal model—the roles employers play and the services they provide vary from program to program and from locality to locality.

Governance

Governance is the leadership function exerting control over what does and does not happen in the programs and may consist of a formal structure or an informal relationship

Table 2

Components of the School-to-Work Opportunity Initiative

Component	John Hancock Financial Services	Sutter Health	Marriott Corporation	Weldun International Corporation	Wood & Jones Printing Co.
Work-based learning component		●	●		●
School-based learning component	●	●	●	●	●
Connecting activities	●			●	

that plays an integral role in the design and implementation of the program. Four of the five programs have formal governance structures. The Sutter/Encina program is the only one where no local board currently exists. Sutter Health has worked informally with the Encina Health Academy, other health employers, and community organizations in establishing and implementing its school-to-work youth apprenticeship program. However, Sutter believes that a local governance board would be useful and is working with two groups in Sacramento to facilitate the creation of such a board.

Boards vary widely in terms of their structure, but their role and the role of employer members are similar. Pasadena is using the existing Graphic Arts Academy Board as its advisory committee. In Boston the executive planning committee of the Private Industry Council, which was created under the Job Training Partnership Act, serves as the governing board. In Michigan, the MT3 project has its own governance structure, the MT3 Roundtable. In Oklahoma, a business and education consortium, consisting of ten employers from various industries and vocational educators, acts as the governing board. Regardless of the structure, boards generally review and advise on curriculum, materials, student recruitment, and program design. Employers play an important role on these boards. Four of the five employers (Weldun, Sutter, Marriott,

and John Hancock) were instrumental in initiating their local school-to-work efforts, and they play leadership roles in the program. They helped to design the program and are key players in the decision-making process. In Pasadena, the Printing Industries Association of Southern California was a driving force behind the youth apprenticeship effort. Relations between the industry and the school leadership are now on firm footing, but initially there were tensions around program design, equipment, and control. While not a founding member, Wood & Jones currently sits on the advisory board in Pasadena.

The local boards in the four sites covered in the interviews would need to add representatives of organized labor, postsecondary schools, and students to meet the requirements of local partnerships contained in the School-to-Work Opportunities Act. Sutter Health and Marriott Corporation are also members of their statewide advisory councils, the California New Youth Apprenticeship Steering Committee (Sutter), and the Oklahoma School-to-Work Steering Committee (Marriott). These advisory groups oversee the statewide school-to-work initiatives, another requirement of the school-to-work legislation.

Program Design

The blueprint for each program is unique, reflecting the local situation and the past experiences of the employers involved. Some employers used the experiences of existing initiatives and molded those programs to fit their situation. The youth apprenticeship programs of John Hancock Financial Services and Sutter Health modeled their efforts around Project ProTech, Boston's health careers school-to-work program. Employers also built on previous experiences with work-related programs for youth and revised the program design accordingly. For example, several years ago John Hancock created Project Hope, a two-year work experience program for high school juniors and seniors. It quickly learned that students lacked the basic work-readiness skills to work effectively. This experience led Hancock to expand the Project Hope program into a more structured effort through ProTech Financial Services.

Sutter Health became excited about youth apprenticeships through an executive's involvement in the statewide youth apprenticeship steering committee. As a result, Sutter staff began researching various school-to-work programs throughout the country and visiting programs such as Project ProTech. However, the staff explained,

> We actually created it. What we have at Sutter is a hybrid. An amalgamation of all of the lessons we learned. . . . [We] gathered information and data, trying to see what best practices work at all the sites, to try to avoid making some of the most glaring mistakes in putting together a program like this.

Two school-to-work programs, Marriott and Sutter Health, are designed as three-year efforts, with students entering the program in the eleventh grade and continuing through the first year of postsecondary education. The employers have incorporated job shadowing as a key component of the initial year of the program to provide students with exposure to a variety of aspects of the industry. Based on this experience, students will select one area to focus on throughout the remainder of the program. Marriott modified its employee training program to create its self-paced, school-to-work, work-based training. Students will work at Marriott twenty hours a week and go to school twenty hours a week. Sutter's program design requires students to interview for positions in their junior year, after the job-shadowing experience, and to begin as part-time employees of Sutter in the twelfth grade.

John Hancock's Project ProTech is a "two-plus-two" program. Clusters of students begin in the eleventh grade. They first receive an overview of the industry, then attend workshops on work readiness, résumé writing, and career awareness. The students are hired as interns during the second half of their junior year and continue through high school graduation. The design for the students' postsecondary experience has not yet been completed.

All three of these programs found that career awareness was a key part of the initiative. Employers believe students should be exposed to a broad cross section of the industry prior to selecting a specific aspect of the trade where they will obtain more technical training.

The MT3 program design is unique in that it simulates a work environment at Weldun International's on-site training facility (rather than providing work-based learning on the job). As indicated earlier, the program was created in response to a reduction in funding for vocational education by local high schools, the desire to more fully use the Weldun training center, and the need for highly skilled machinists by local employers. The students spend three hours a day, five days a week at the training center. This allows students at area high schools access to the high-technology equipment used at Weldun, which is updated on a regular basis, without requiring the local school districts to invest in new equipment and facilities. This arrangement is also attractive to other small machine shops in the area that cannot afford to offer such comprehensive training experiences on site.

Wood & Jones Printing Co. was the only employer not directly involved in program design. The employer became involved after the initiative had begun and the initial design was in place. The Pasadena Graphic Arts Academy youth apprenticeship program begins with career awareness activities in the tenth grade, then integrates academic and technical training, and finally pays for internships during the summer

between the eleventh and twelfth grades. During the senior year, students concurrently take academic courses at Pasadena Academy and graphic arts lab courses at Pasadena Community College. Articulation agreements are being developed to assure that the students acquire appropriate credit or advanced standing from the high schools and postsecondary training institutions involved. The program is evolving and, as revisions are proposed, the Printing Industry Association advisory committee to the Graphic Arts Academy is reviewing the proposals, allowing Wood & Jones to participate in program changes.

Curriculum Development

Work-related curriculum has been developed by all but one of the employers involved in the study. The Marriott Corporation adapted its existing employee training, self-paced, entry-level training program, which allows first-year students to rotate through seven departments. In each area, students must attain certain skills that are certified by their training adviser. The second and third years of the work-based curriculum provide students with the opportunity to gain proficiency in one area of the hospitality industry.

As indicated earlier, Sutter Health visited a number of school-to-work health programs around the country to acquire the base of knowledge for developing the health services curriculum. Sutter staff and an intern working at Sutter, who is preparing to become a vocational counselor, take time each week to work on the curriculum, which is still being developed with the Encina Health Academy staff.

The curriculum developed by the MT3 Roundtable requires students to build their own portfolio, working on projects with specific quality and productivity standards. Students must meet established occupational standards to complete the program. Articulation agreements have been developed with local community colleges to provide postsecondary school credit for those students who complete the program and are interested in attending community college. The MT3 program does not provide work-based training, but rather uses a competency-based curriculum at Weldun International's training facility.

John Hancock instituted for first-semester eleventh graders a work-readiness, world-of-work curriculum taught by Hancock employees. Students receive an overview of the financial services industry and instruction in résumé writing and interviewing techniques and are provided with job-shadowing experiences in the first year of Project ProTech. A work-based curriculum for financial services has not yet been developed.

A work-based curriculum is being finalized in the Pasadena Graphic Arts Academy youth apprenticeship program for student interns hired during the summer between the eleventh and twelfth grades. Wood & Jones was not directly involved in the curriculum development, although other employers have contributed to the curriculum.

Two of the five employers have been involved in developing the academic curriculum. Sutter Health staff work with the Encina Health Academy on developing curriculum reflecting the "real world of health services." Sutter and Encina staff have also been involved in state-sponsored curriculum integration workshops. Marriott identified the types of academic courses it felt necessary for students involved in the hospitality program. Other employers are interested and feel that they could provide valuable input on ways to integrate the work-based experience into the academic curriculum, but some employers feel that schools are reluctant to include them in the academic side of the process.

Activities and Services Provided by Employers

The types and level of activities and services provided by employers in the study range from offering career awareness information and mentoring to providing a combination of services that include paid career awareness, job shadowing, internships, work-based learning, and mentors (see Table 3). All of the employers provide some type of career information on their respective industries, either formally or informally.

The two programs providing the most structured work-based learning experiences, Marriott Corporation and Sutter Health, offer the most extensive opportunities for student learners. As indicated above, these activities include information on careers; job shadowing; internships; paid, structured work-based learning; and mentors. The programs generally begin with job shadowing to allow students the opportunity to observe a diverse cross section of the industry. Students then move into a more structured learning situation, either in an internship or work-based learning position.

Table 3

School-to-Work Related Activities Employers Provide

Activity	Financial Services John Hancock Financial Services	Health Sutter Health	Hospitality Marriott Corporation	Machining Weldun International Corporation	Printing Wood & Jones Printing Co.
Career awareness	●	●	●	●	●
Job shadowing	●	●	● (Limited)		
Internships	●	● (Limited)	●		
Paid work-based learning	●	●	●		
Structured work-based learning		●	●	● (Provided in a corporate training center)	
Mentors	●	●	●		● (Counseling mentor rather than work-site mentor)

Employers indicated that a variety of factors affect the types of activities provided to school-to-work students. For example, the John Hancock Financial Services program provides all of the activities Marriott and Sutter Health offer, with the exception of structured work-based learning. However, the Hancock program wants students to be as productive as possible while on the job because they are being paid. The perception is that if too much time is spent on training, the productivity of students and regular staff will be reduced.

The unique program design of Weldun International's MT3 program, which focuses on technical training at a corporate training facility, limits the types of activities typically associated with a school-to-work program, such as work-based learning under the direction of a skilled mentor. The instructors attempt to simulate the workplace, requiring students to punch in on the time clock and meet quality-control standards for their work projects.

Wood & Jones Printing is a very small firm located in economically depressed Southern California. The owner believes that she cannot provide structured, paid work-based learning to students at a time when permanent employee hours are being reduced. She is a mentor for a student at the Graphic Arts Academy and the student "job shadows" her, accompanying her to meetings with graphic designers, observing her activities at the company, and attending community meetings. The student was a paid intern with a larger printing firm over the summer months as part of the Graphic Arts Academy's youth apprenticeship program.

Sutter Health indicated that internships in the health field pose a unique situation. Historically, health professionals participate in unpaid internships for academic credit as a part of their training and preparation for the medical field, especially in clinical areas. Only administrative internships within the health service profession, such as human resources or finance, are common in the health field and would be available to students interested in pursuing careers in these areas. Sutter's school-to-work program treats the students as youth apprentices, not as interns. Sutter is considering the possibility of providing internships to youth apprentices who have completed the advanced stages of clinical training and are able to make contributions to the health service provider and further their applied learning. A final decision has not been made in this area.

Three of the employers provide teachers or counselors with an opportunity to visit their firms to learn more about the industry. The academic teachers job shadow at John Hancock, and some teachers spend the entire summer at the firm observing various departments. Sutter Health offered the teachers at Encina Career Academy an orientation during the summer of 1993 to familiarize them with the health care environment and to "give them a vision to link with their curriculum." Weldun International brings in math teachers who are assigned to workers at a Weldun plant for a day to allow them to understand how math is applied in the workplace.

Employers were also asked if they provide career information to the children of their employees, based on the assumption that employers who assist its employees' families to explore careers might be more inclined to become involved in school-to-work programs. The respondents indicated that, in fact, this is not the case. None of the employers provides career information to the children of its employees. Employers are generally concerned over the perception of nepotism and favoritism if family members are ultimately hired by the firm. In a different twist to this scenario, John Hancock has begun providing job opportunity information to the parents of the students involved in the school-to-work program, hiring several of the parents and considering a more systematic approach to recruiting the students' parents for employment.

Public Policies Affecting Employer Participation

The study sought to determine the types of public policies and approaches that would encourage employers to participate in school-to-work programs or expand the number of students they were willing to work with if they were already involved in a school-to-work initiative. The responses can be classified in two categories: financial incentives and nonfinancial incentives. Financial incentives include tax incentives, subsidies to cover student wages, and reimbursements for staff time dedicated to supervising and training students. Nonfinancial incentives are more closely related to the program design and include (1) having high school teachers assume the supervisory responsibilities of students in their work-based learning components; (2) reducing paperwork through the creation of nonprofit organizations that would assume payroll and worker compensation insurance responsibilities; and (3) establishing an intermediary to coordinate and interface with the employers, schools, and students.

The School-to-Work Opportunities Act allows states and localities to support many nonfinancial incentives such as intermediaries, work-based curriculum development, and professional development. The Act does not include tax incentives and specifically prohibits the use of school-to-work grant funds to subsidize student wages. States such as Wisconsin, Pennsylvania, Oregon, and Maine have passed legislation that would enable the state to reimburse employers for start-up costs, mentor training, and student wages.

Financial Incentives

The study revealed that employers were most supportive of public policies that they perceived would require the least amount of red tape, paperwork, and direct government involvement.

Four of the five employers supported a tax incentive. They indicated that school-to-work programs are expensive, especially for those employers who pay students wages and receive no immediate return. Marriott stated that tax credits create "a mutually beneficial relationship for the company, the government, and all the people in the United States." The responses generally indicated that employers believe that tax incentives are the cleanest method of financial reimbursement with the least amount of red tape.

The concept of subsidized student wages was generally supported by employers, although John Hancock indicated that it can accommodate a set number of students and, even if the wages were subsidized, that number would remain relatively constant.

A third financial incentive, reimbursement for the extra costs of training and supervising the students, was also supported by most employers who felt it would encourage program expansion. The study revealed that firms consistently see an initial loss in productivity of the skilled workers or mentors who provide the students' training. A reimbursement for these costs would offset the loss to some extent. However, one employer thought that a reimbursement for these costs would entail too much paperwork.

Employers were asked if they felt firms would be more inclined to participate in a school-to-work program if they were reimbursed a certain amount for those students who did not remain with the employer for a specified period of time. The respondents indicated that this would not be a motivator. Employers do not want to guarantee placement in their companies at the completion of the program; therefore, they did not feel that the program should be held accountable for student retention in a job.

Nonfinancial Incentives

Employers see a definite need for an intermediary to interface with the schools, students, and employers. Funding for this entity is not a direct subsidy to the employers, but this function is viewed as essential to increase communication between the employers and the schools and provide all parties with a neutral entity to turn to if problems arise. In programs where intermediaries do not exist, employers are encouraging the program to establish such an organization or identify an individual to take on that responsibility. The bridging function provided by an outside group was also seen as a savings to employers who are now assigning staff to fulfill that role and had the support of all the employers interviewed.

The idea of having academic school staff assume supervisory responsibility for students in the work-based learning component at a firm was universally rejected by all employers interviewed. They felt their own employees are better prepared to provide work-based training. One employer indicated that in an ideal situation employers could benefit from the theoretical expertise of the educators, and the educators could learn from the real-world application; however, in reality, he believed it would not work because of liability and other issues.

Most employers did not view the creation of an independent organization to assume the payroll function and administrative paperwork, as has been done in Maine, as an effective incentive for employers. Rather, the large employers viewed it as adding another layer of bureaucracy to the program. As John Hancock indicated, "Another group doing the paperwork would still require John Hancock to keep records, and it would just be a duplication." Wood & Jones, a small employer with twenty employees, indicated it would support the idea if the organization would assume responsibility for workers compensation insurance, which is a major concern of employers in California.

Conclusion

The study provides a variety of impressions and key observations that may assist school-to-work programs in recruiting employers and policy makers as they move toward implementing the School-to-Work Opportunities Act of 1994.

Recruiting Employers

The study revealed a consensus among employers in certain key areas while leaving other issues related to recruiting and the active involvement of employers open for speculation. The following conclusions can be drawn from employer responses:

- Employers rarely participate in school-to-work initiatives for a single reason. Their participation is greatly affected by local situations within individual communities and companies. However, concerns over the quality of education and the skills of entry-level workers have a significant impact on decisions to participate in school-to-work initiatives.
- Employers consistently said that the first and most important benefit they anticipate from their school-to-work program is a higher-skilled entry-level worker. School-to-work programs are also seen as an effective screening mechanism for new employees.
- Employers do not become involved in school-to-work programs with the intent to hire all of the students involved in the program, although they want the option of hiring some of the highly skilled students at some point.
- Employers making the largest financial commitment and providing paid, structured work-based learning experiences believe that school-to-work programs should have preparation for work in a particular industry as an important goal.
- The program designs of the school-to-work opportunities programs reflect that postsecondary education is an acceptable and even supported outcome for students involved in school-to-work programs.
- Employers want to be equal partners in the process and not brought into the initiative only as "window dressing" to meet the requirements of a law or regulation. The role of the employer needs to be explained clearly in the recruitment process, but the marketing message should emphasize that employers can mold that role to their individual situations.
- School-to-work program planners need to outline specific activities envisioned in their school-to-work programs, rather than using generic terms such as Tech Prep, co-op ed., voc. ed., and youth apprenticeship. Employers have a limited understanding of these terms and, in some cases, negative perceptions of the programs.

- There is no universal model. The roles employers play and the services they provide vary from program to program and from locality to locality.

Public Policies

In general, employers want the least amount of red tape and bureaucratic involvement in school-to-work efforts. Specific public policies that would positively affect employer participation include the following:

- Employers strongly endorsed the creation of intermediary organizations that would act as the bridge linking schools, employers, and students. Employers indicated that an entity that would interface with the employers, schools, and students could relieve their own staff of these duties while providing students with a neutral intermediary to share their concerns regarding school or work.
- Financial incentives—such as tax incentives, student wage subsidies, and reimbursement for staff assigned to train students in work-based learning components—would contribute to motivating employers to participate and expand participation.

Appendix A

Program Summaries

The following program descriptions are based on information provided by the employers involved in the respective school-to-work transition programs. The explanations are primarily the employers' perceptions and understanding of the program.

Finance Industry

John Hancock Financial Services, the Private Industry Council (PIC) of Boston, and Boston High Schools, Boston, MA

Project ProTech is the outgrowth of two distinct initiatives—Project HOPE, which is a two-year work experience program developed by John Hancock Financial Services, and Project ProTech, a two-plus-two school-to-work program initially developed in the health field. The financial services program offered by John Hancock begins with students in their junior year of high school. Students are clustered by subjects, such as English, math, or science. In the fall semester, each cluster of students is provided with an overview of the financial industry and workshops on work readiness, résumé writing, and career awareness offered two days a week at John Hancock facilities and taught by Hancock employees.

In February of their junior year, students interview with different departments and are hired as paid interns for the remainder of the school year and the summer. Students in their senior year continue their work-based training after school. The postsecondary portion of the program is still evolving. This is the first year John Hancock has participated in Project ProTech, and it is yet to be determined how the work-based learning component for the postsecondary students will be structured.

The internships do not follow a structured curriculum. At this point, skill standards and the credentials students receive to certify levels of mastery are still to be determined.

Health Industry

Sutter Health and Encina Health Careers Academy, Sacramento, CA

The Sutter Health/Encina Health Careers Academy project is a three-year youth apprenticeship program that began in September 1993. To explore industry through academics and technical training, Encina Health Careers Academy students begin

their program in career clusters in a school-within-a-school setting in the tenth grade. All juniors at Encina participate in a job-shadowing experience at either Sutter or other area health facilities. Spending one day a week for three weeks in a department and then rotating to another unit, students observe eight different departments throughout the school year. Sutter has developed a student manual to stimulate questions about the departments and the relationship between the work being done at Sutter and the classroom learning experience at Encina.

In the spring of the junior year, students interested in participating in the youth apprenticeship program must go through an interview process for selection. Eight students were hired by Sutter as apprentices. These students are paid part-time employees of Sutter who follow a curriculum developed by Sutter. Students are assigned to a mentor-supervisor and must achieve a level of mastery before advancing to the next level.

Upon graduation from the academy, the youth apprentices may pursue a two- or four-year college program or enter the health field. Sutter has committed to working with the youth apprentices through the first year of postsecondary school. The postsecondary work-based learning design has not been solidified.

Hospitality Industry

Marriott Corporation and Moore/Norman Area Vocational Technical School, Norman, Oklahoma

The Marriott—Moore/Norman Hospitality program is a new three-year initiative. The first class of seven high school juniors began in January 1994. The students spend twenty hours a week in paid work-based learning at the Marriott and twenty hours a week in the classroom at an area vocational technical school.

The managers of each department and the director of operations developed curricula for each cluster: food service, housekeeping, front desk, engineering, accounting, security, and recreation. Students are provided with training manuals and resource materials, work at their own pace, and are supervised by training advisers. To progress within and among clusters, students must master certain skills, with the skill attainment certified by their training advisers.

Juniors rotate through the seven clusters, spending seven weeks in each department while at Marriott. Seniors select one area of concentration and spend the next two years learning the intricacies of the operations. Supervisory and management training can be provided in the third year of the program.

Marriott has worked with the Moore/Norman Vocational Technical School to identify

academic courses that will assist students participating in the hospitality program. Marriott provides courses in career planning as well.

The Marriott property in Norman operates the technical training center for the U.S. Postal Service, the seventh largest Marriott property in the world. The Marriott Corporation employs more than 300,000 people worldwide.

Machining Industry

Weldun International Corp. and the West Berrien County Career Technical Education Consortium, Three Oaks, Michigan

The Manufacturing Technology-Targeted Training (MT3) is a technical training program in machine tool and automated assembly systems and robotics. The program is offered through a consortium of Weldun International Corporation, eight smaller employers, and the West Berrien County Career Technical Education Consortium. The program is offered to juniors from four area high schools. To be accepted into the program, students must have a 3.0 grade point average in algebra and successfully complete an interview process. Currently, fourteen students are enrolled in MT3, although the program can accommodate twenty-three students.

MT3 students attend the Weldun International Training Center three hours a day, five days a week, for technical training. The MT3 program provides hands-on learning for the students with the most up-to-date equipment provided by Weldun International. Students are provided with "labor cards," which are computer cards completed by students and instructors at the end of each day to indicate tasks the student worked on that day and the amount of time taken to accomplish the tasks. Students build their own portfolio as they progress through the program. To further simulate the work setting, students must use the time clock to punch in their arrival and departure times.

Students do not participate in paid, work-based learning at the Weldun International facility or with other employers. However, students work on projects and must meet specific quality and productivity standards for each project. Students completing the two-year course are prepared to attend a two- or four-year college program, go directly into a permanent job, or enter an apprenticeship program. Articulation agreements have been arranged with the local community college for students interested in pursuing the community college or apprenticeship pathway.

Weldun International is owned by Bausch, a firm based in Germany. Bausch employs over 300,000 people worldwide, with Weldun International employing about 400. The training center was originally used as a preapprenticeship training facility for entry-level workers at Weldun.

Printing/Graphic Arts Industry

The Pasadena Graphic Arts Career Academy and the Printing Industry Association (PIA) of Southern California, Pasadena, CA

Wood & Jones Printing Co. is a member of the PIA advisory committee. The Pasadena Graphic Arts Career Academy is a "school within a school" combining academic instruction, training, and paid internships in the graphic arts and printing industry. Students remain together with the same team of teachers for the two-year program. In the summer after their junior year and in the second semester of their senior year, students are placed in paid internships at printing companies. The first interns participated in the paid, work-based learning component during the summer of 1993. A structured work-based curriculum is being finalized and will be used for students in the summer of 1994.

Seniors in the Academy also attend Pasadena City College where they take advanced academic or technical courses. Graduates of the Academy receive a specialized high school diploma. They have the option of attending a two- or four-year college, pursuing advanced technical training, or going directly into the industry.

Appendix B

Employer Survey

Name:

Company:

Industry:

Date:

1. How would you describe the school-to-work program your firm is involved in?

2. What outcomes do you expect from students participating in the program?

3. I am going to read you a list of activities; can you tell me whether you are currently participating in or providing any of these? (Ask question, if they answer no, ask if they would be willing to.)

   - provide career information
   - offer job-shadowing opportunities to students
   - provide internships for students
   - provide structured, paid, work-based learning opportunities for students
   - provide job shadowing, internships and/or paid work opportunities for teachers to help them gain a better understanding of the work environment
   - assist in program design
   - assist in developing relevant work- and school-based curriculum

- serve on planning and oversight board
- permit employees to serve as mentors and trainers for students on the job
- support employees by giving them time off to attend meetings and school activities
- provide information to employees on career opportunities for their children

4. Why did you decide to participate? (Ask general question, then ask specific questions.)

   - concern about condition of education in your community
   - desire to be a good citizen
   - need for good, quality entry-level workers
   - other

5. What benefits have you or your company gained or expect to gain from participation? I will read you a list and please indicate yes or no.

   - community goodwill
   - motivation for adult workers to improve their skills and take more interest in work
   - opportunity to screen potential new employees
   - if positions were subsidized, offset of some labor costs
   - other

6. How many students are you training in your firm or do you plan to train?

7. What will it take for your firm to train more students?

   - tax incentives
   - student wages are subsidized
   - reimbursement for extra costs of training and supervising students
   - reimbursement for training costs if students do not stay with firm for at least x months after completing training
   - teachers take over supervisory duties on site
   - less paperwork, such as students on payroll of intermediary
   - a coordinator to facilitate relationships among school, students, and employers
   - other

8. I am going to read you a list of reasons that may affect employers' decisions to participate in a school-to-work initiative. Could you indicate whether they are very important, moderately important, or not important to employers who are deciding if they should participate in school-to-work activities?

   - program planners/operators make convincing case for participation
   - program planners/operators explain program clearly and make employer role explicit
   - program planners/operators are well organized and make it easy to participate
   - asked by your trade association or other business-led group to participate
   - asked by another employer to participate
   - assurances that you would have the opportunity to share information and network with other employers in your state and throughout the country
   - other

9. There are many education/business programs that involve employers. We would like to know how familiar you are with these various efforts. I am going to list four programs and would like you to describe them in your own terms:

   - cooperative education
   - Tech Prep
   - youth apprenticeship
   - vocational education

10. Would it affect your willingness to participate in the school-to-work program if it were presented to you as an educational improvement strategy, as opposed to a work preparation strategy? This would mean that students might not enter your industry once they complete the program or complete postsecondary school. Instead, by working in your firm, students would gain an understanding of how academic concepts can be applied to real work. They would also get an understanding of what your industry is all about and build a better work ethic.

Board of Directors, 1994-95

Sol M. Linowitz, Honorary Chairman of the Board:
Former Senior Counsel, Coudert Brothers; former U.S. Ambassador to the Organization of American States; and former Chairman of the Board, Xerox Corporation

Cassandra A. Pyle, Chairman of the Board:
Executive Director Emeritus, Council for International Exchange of Scholars

John Diebold, Chairman of the Executive Committee and Vice Chairman of the Board:
Chairman, The Diebold Institute for Public Policy Studies, Inc.

Joseph S. Iseman, Secretary of the Corporation:
Counsel to Paul, Weiss, Rifkind, Wharton and Garrison

Stephen F. Moseley, President and Chief Executive Officer

Robert O. Anderson:
President, Hondo Oil and Gas Company

Barbara B. Blum:
President, Foundation for Child Development

Roberta N. Clarke:
Associate Professor and former Chair, Department of Marketing, School of Management, Boston University

Alonzo A. Crim:
Professor, Department of Education and Special Assistant to the President on College and School Partnerships, Spelman College

Joseph L. Dionne:
Chairman and CEO, McGraw-Hill, Inc.

Marie Davis Gadsden:
Chair Emeritus, OXFAM; former Deputy Director, National Association for Equal Opportunity in Higher Education

Frederick S. Humphries:
President, Florida A&M University

Walter F. Leavell:
Health Advisor; Former President, Charles R. Drew University of Medicine and Science

F. David Mathews:
President, Kettering Foundation; former U.S. Secretary of Health, Education and Welfare

Ann McLaughlin:
President, Federal City Council; former U.S. Secretary of Labor

James A. Perkins:
Chairman Emeritus of the Board, International Council for Educational Development

Frank H.T. Rhodes:
President, Cornell University

Joseph E. Slater:
President Emeritus and Senior Fellow, Aspen Institute for Humanistic Studies

Niara Sudarkasa:
President, Lincoln University

Willard Wirtz:
Partner, Friedman and Wirtz; former U.S. Secretary of Labor

This paper was written for the Academy for Educational Development's National Institute for Work and Learning's Study of School-to-Work Transition Education Reform which is part of the Studies of Education Reform program, supported by the U.S. Department of Education, Office of Educational Research and Improvement, Office of Research, contract No. RR 91-172012. The program supports studies and disseminates practical information about implementing and sustaining successful innovations in American education. The opinions in this document do not necessarily reflect the position or policy of the U.S. Department of Education or the Academy for Educational Development, and no official endorsement should be inferred.

Academy for Educational Development

Principal Offices:

1875 Connecticut Avenue, NW
Washington, D.C. 20009-1202
Tel: (202) 884-8000
Fax: (202) 884-8400
Internet: ADMINDC@AED.ORG

1255 23rd Street, NW
Washington, D.C. 20037
Tel: (202) 884-8700
Fax: (202) 884-8701
Internet: ADMINDC@AED.ORG

100 Fifth Avenue
New York, NY 10011
Tel: (212) 243-1110
Fax: (212) 627-0407
Internet: ADMINNY@AED.ORG